Lab Assignment
& Solution



Cybersecurity Professional Program

Introduction to Python
for Security

# Functions

## PY-05-LS4
## Main Identification

**Note:** Solutions for the instructor are shown inside the green box.

## Lab Objective

Understand the value of the ***__main__*** variable and how to use it in code.

## Lab Mission

Prepare a program that executes only if its main file is run directly.

## Lab Duration

15–25 minutes

## Requirements

- Basic knowledge of Python

## Resources

- Environment & Tools
  - Windows or Linux
    - PyCharm
    - Python 3

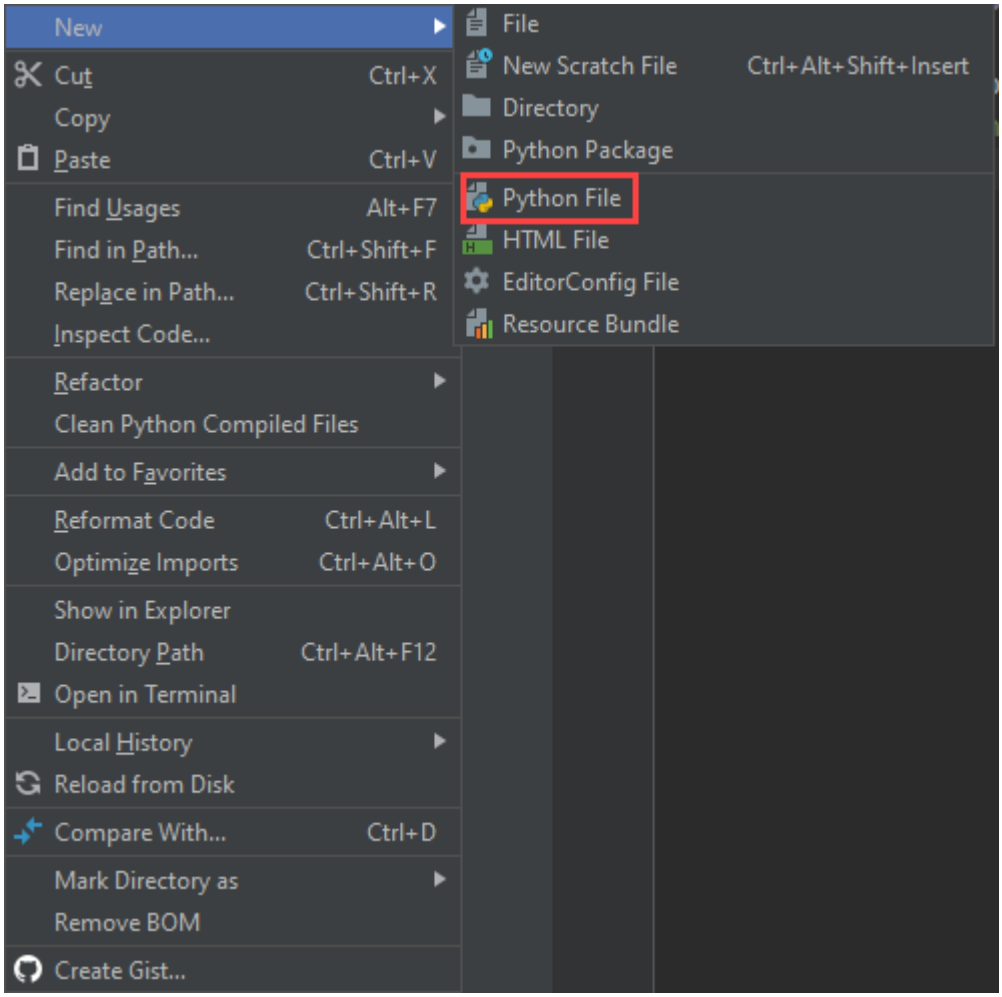
## Textbook References

- Chapter 5: Functions
  - Section 2: Code Handling

## Lab Task: Main Identification

Execute a Python file by checking if it is directly executed and understanding the mechanism.

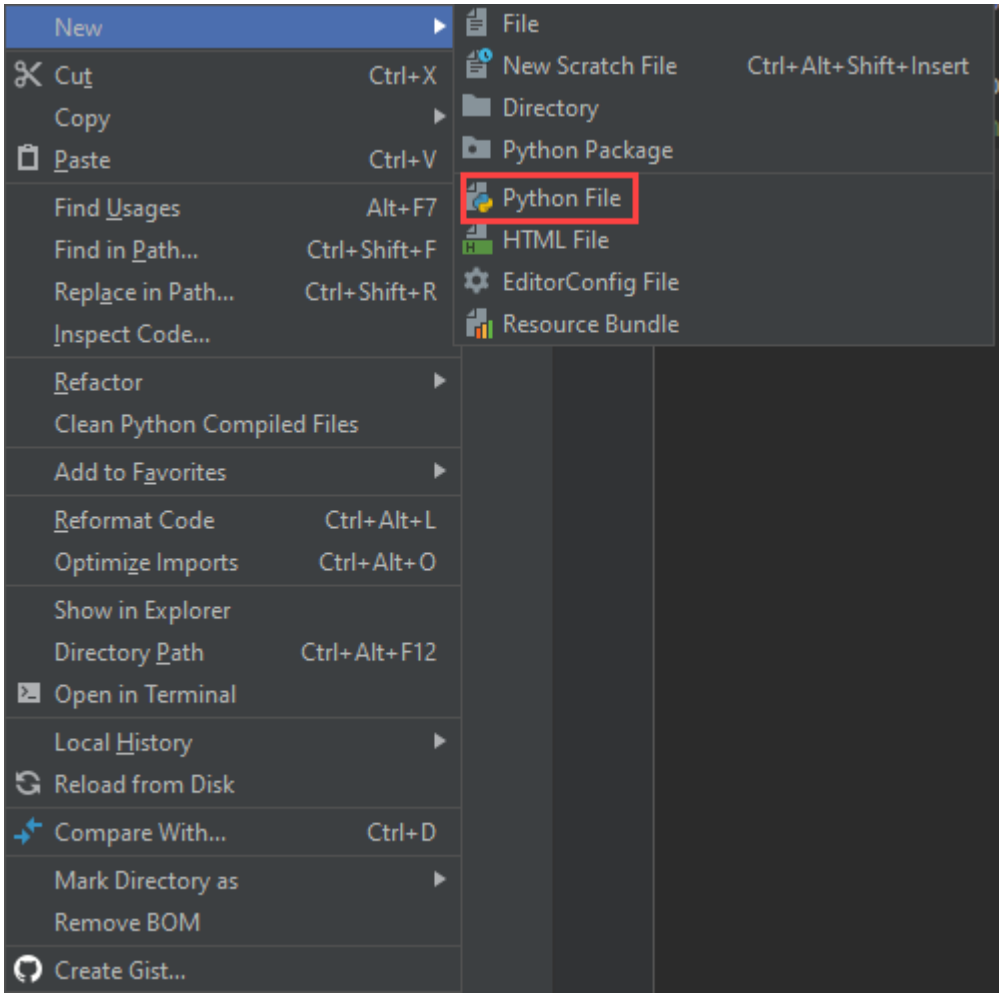
1 Create a new Python file in PyCharm by right-clicking the project you created and selecting **New** > ***Python File***. Name this file ***message.py***.




2 Define a new function that prints the file name in ***message.py***.

```
def main():
    print("Hello from:", __name__)
```

**3** Create a second Python file in PyCharm by right-clicking the project you created and selecting **New** > ***Python File***.




**4** Import to the file the previous file.

```
import message
```

**5** Create a new function.

```
def main():
```

6 Within the function, invoke the main function of the imported file.

```
def main():
      message.main()
```

7 Outside of the function, create a condition that checks if the current file is directly executed.

```
if __name__ == '__main__':
```

8 Within the condition, print the file's name and invoke the main function of the file.

```
if __name__ == '__main__':
   print(__name__)
   main()
```

9 Run the file.